



PATENT: 06471 USA

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLI-  
CATION OF : Eric Howard Klingenberg, et al.  
SERIAL NO. : 10/715916 GRP. ART UNIT:  
FILED : 18 November 2003 EXAMINER:  
FOR : AQUEOUS POLYURETHANE DISPERSION AND METHOD  
FOR MAKING AND USING SAME

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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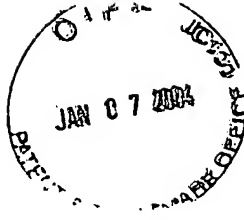
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Respectfully submitted,

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PTO/SB/08A (08-03)

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**Complete if Known****INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10/715916
Filing Date	18 November 2003
First Named Inventor	Eric Howard Klingenberg, et al.
Art Unit	
Examiner Name	
Attorney Docket Number	06471 USA

Sheet

1

of

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**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
		US- 4,269,748	5/26/1981	K. Nachtkamp, et al.	
		US- 4,914,161	4/3/1990	D. Muller, et al.	
		US- 5,354,807	10/11/1994	M. J. Dochniak	
		US- 5,637,639	6/10/1997	Y. Duan, et al.	
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**FOREIGN PATENT DOCUMENTS**

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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
		JP 3361691 B2	1/7/2003	Japanese		✓

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Art Unit	
Examiner Name	
Attorney Docket Number	06471 USA

Sheet **2** of **2****NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		S. Y. LEE, et al., "Preparation and Properties of Water-borne Polyurethanes," <i>Polymer International</i> , 42, pp. 67-76 (1997).	✓
		B. K. KIM, "Aqueous Polyurethane Dispersions," <i>Colloid &amp; Polymer Science</i> , Vol. 274, pp. 599-611 (1996).	✓
		D. DIETERICH, "Introduction to Urethane Ionomers," <i>Adv. Urethane Ionomers</i> , Bayer AG, Germany, pp. 1-21 (1995).	✓
		C. YANG, et al., "Application and Statistical Experimental Strategies to the Process Optimization of Waterborne Polyurethane," <i>Polymer Engineering and Science</i> , Vol. 35, No. 8, pp. 722-730 (1995).	✓
		S. D. SENEKER, et al., "New Polyether Polyols for Aqueous Polyurethane Dispersions," ARCO Chemical Company, presented at UTECH Asia '97, SunTec City, Singapore (1997).	✓
		D. DIETERICH, "Aqueous Emulsions, Dispersions and Solutions of Polyurethanes; Synthesis and Properties," <i>Progress in Organic Coatings</i> , Vol. 9, pp. 281-340 (1981).	✓
		S. RAMESH, et al., "Chain-Extended Polyurethane Anionomers Using Ionic Diols of Varying Methylene Spacers," <i>Journal of Polymer Science: Part A: Polymer Chemistry</i> , Vol. 34, pp. 1713-1721 (1996).	✓
		F. M. B. Coutinho, et al., "Synthesis and Molecular Weight Determination of Urethane-Baed Anionomers," <i>Polymer Bulletin</i> , Vol. 37, pp. 1-5 (1996).	✓
		J. CHEN, et al., "Synthesis of Polyurethane Acrylate Oligomers Based on Polybutadiene Polyol," <i>Journal of Polymer Science: Part A: Polymer Chemistry</i> , Vol. 34, pp. 2889-2907 (1996).	✓
		T. K. KIM, et al., "Preparations and Properties of Polyurethane Aqueous Dispersion from Uncatalized Systems of H <sub>12</sub> MDI, PTAd/bisphenol A Polyol, and DMPA," <i>Colloid &amp; Polymer Science</i> , Vol. 269, pp. 889-894 (1991).	✓
		C. K. KIM, et al., "Aqueous Dispersion of Polyurethane Ionomers from Hexamethylene Diisocyanate and Trimellitic Anhydride," <i>Colloid &amp; Polymer Science</i> , Vol. 269, pp. 895-900 (1991).	✓
Examiner Signature			Date Considered

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